TRANSCEIVER

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Abstract of **JP6284038**

PURPOSE: To use a common local oscillator for down-conversion of a reception signal and up-conversion of an intermediate frequency signal by frequency- dividing a modulation carrier before up-converting the modulation carrier.
CONSTITUTION: A reception signal Rx is given to a down-converter 2 via an RF amplifier 1, and intermediate frequency signal is given to an IF amplifier 3, from which a signal IF is given to an output circuit. Furthermore, a transmission information signal Tx is modulated on a carrier signal with a frequency twice the intermediate frequency at a modulator 9. The modulated carrier signal is given to an UP-converter 4 through a 1/2 frequency divider 5. A common local oscillator 6 is used for the converters 2, 4. An UP conversion signal being an output of the converter 4 is given to an RF amplifier 7 via a band pass filter 8. In this transmitter-receiver, in the case of reception, a bias to the divider 5 is released or no energy is supplied to the divider 5 so as to prevent any IF signal from being produced on a transmission path, and the amplifier 3 amplifies a reception signal without interference from the transmission path.